

5XXX Series

In 5XXX series alloy range, we can supply material in 5005, 5050 and 5052.

Alloy 5005

Chemical Composition - AA 5005

Alloy	Fe	Si	Mg	Mn	Cu	Zn	Ti	Cr	Each	Al
5005 (min)	0.30	0.10	0.50	0.01	0.01	0.01	0.020	0.01	0.05	Remainder
5005 (max)	0.70	0.30	1.10	0.20	0.20	0.25	0.030	0.10	0.15	Remainder

*The given data is in %

Mechanical Properties - AA 5005

Alloy	Temper	UTS (Mpa)		% Elongation		
		Min	Max	0.5 mm - 0.8 mm	0.81 mm - 1.30 mm	1.30 mm - above
5005	O	105	150	18	20	22
	H12	120	160	3	4	5
	H14	140	180	2	3	4
	H16	160	200	1	2	2
	H18	185	-	1	2	2

Characteristic – Alloy 5005

Corrosion Resistance	Medium
Anodizing	Good
Formability	Very Good
Machinability	Good
Weldability	Good

Alloy 5050

Chemical Composition - AA 5050

Alloy	Fe	Si	Mg	Mn	Cu	Zn	Ti	Cr	Each	Al
5050 (min)	0.30	0.10	1.10	0.01	0.01	0.01	0.020	0.01	0.05	Remainder
5050 (max)	0.70	0.40	1.80	0.10	0.20	0.25	0.030	0.10	0.15	

*The given data is in %

Mechanical Properties - AA 5050

Alloy	Temper	UTS (Mpa)		% Elongation		
		Min	Max	0.5 mm - 0.8 mm	0.81 mm - 1.30 mm	1.30 mm - above
5050	O	125	170	18	19	20
	H12	155	195	3	4	5
	H14	175	215	2	3	4
	H16	190	225	1	2	2
	H18	200	-	1	2	2

Characteristic – Alloy 5050

Corrosion Resistance	Medium
Anodizing	Good
Formability	Very Good
Machinability	Good
Weldability	Good

Alloy 5052

Chemical Composition - AA 5052

Alloy	Fe	Si	Mg	Mn	Cu	Zn	Ti	Cr	Each	Al
5052 (min)	0.15	0.10	2.20	0.01	0.01	0.01	0.020	.015	0.05	Remainder
5052 (max)	0.40	0.25	2.80	0.10	0.10	0.10	0.030	0.35	0.15	

*The given data is in %

Mechanical Properties - AA 5052

Alloy	Temper	UTS (Mpa)		% Elongation		
		Min	Max	0.5 mm - 0.8 mm	0.81 mm - 1.30 mm	1.30 mm - above
5052	O	171	213	16	18	19
	H12	213	261	5	7	9
	H14	233	281	4	6	7
	H16	254	302	3	4	4
	H18	268	-	3	4	4

Characteristic – Alloy 5052	
Corrosion Resistance	Good
Anodizing	Good
Formability	Good
Machinability	Very Good
Weldability	Good